DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-024136
Date Inspected: 30-May-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:	N/A		**CWI Present:**	☐ Yes	☑ No
Inspected CWI report:	☐ Yes	☐ No ☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No ☑ N/A
Electrode to specification:	☐ Yes	☐ No ☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No ☑ N/A
Qualified Welders:	☐ Yes	☐ No ☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No ☑ N/A
Approved Drawings:	☐ Yes	☐ No ☑ N/A	**Approved WPS:**	☐ Yes	☐ No ☑ N/A
			Delayed / Cancelled:	☐ Yes	☑ No ☐ N/A

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

BAY 11 – (Skid More Test)

This QA Inspector witnessed Bolt Testing for ASTM A325 Grade. Observed ZPMC QC Mr. Zhang Hai Jung performing bolts testing and ZPMC QC Inspector Mr. Fan Xiao Hun generating report against the testing.

The testing of bolts was performed to determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning and High Tension bolt capability verification test.

Bolt assembly identified as ASTM A325 (High Strength Bolt), Bolt Assembly comprises of (a Bolt, a Nut and a Washer).

Bolt testing was performed on a Unit: Skidmore-Wilhelm; Model: HT; Serial Number: 1014 (Calibration Expiration due date on August 23, 2011) and Torque Wrench identified as XO-486 and Torque Wrench with Dial gauge on it is identified as XO-2 (Calibration Expiration due date on October 03, 2011).

Tested bolt sizes were identified as M24x110 RC Set# DHGM240126.

Tested bolt sizes were identified as M24x120, RC Set# DHGM240127.

Tested bolt sizes were identified as M24x140, RC Set# DHGM240129.

Tested bolt sizes were identified as M24x150, RC Set# DHGM240130.

Tested bolt sizes were identified as M24x90, RC Set# DHGM240123.

Tested bolt sizes were identified as M24x85, RC Set# DHGM240122.

5 bolt assemblies were tested per lot.

After determining Rotation Capacity Test, Inspection Report # 4 for bolt size M24x110 RC Set# DHGM240126 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 6 for bolt size M24x120, RC Set# DHGM240127 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 7 for bolt size M24x140, RC Set# DHGM240129 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 8 for bolt size M24x150, RC Set# DHGM240130 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 21 for bolt size M24x90, RC Set# DHGM240123 was generated by ZPMC QC.

After determining Rotation Capacity Test, Inspection Report # 23 for bolt size M24x85, RC Set# DHGM240122 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 322 for bolt size M24x110 RC Set# DHGM240126 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 323 for bolt size M24x120, RC Set# DHGM240127 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 324 for bolt size M24x140, RC Set# DHGM240129 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 325 for bolt size M24x150, RC Set# DHGM240130 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 326 for bolt size M24x90, RC Set# DHGM240123 was generated by ZPMC QC.

After determining Nut Rotation from Snug-Tight condition for Turn-of-Nut Pre-tensioning Inspection Report # 327 for bolt size M24x85, RC Set# DHGM240122 was generated by ZPMC QC.

Please reference the pictures attached for more comprehensive details.

The generated reports were submitted to the Caltrans Lead Inspector Mr. Mark Miller for review and disposition.

Segment 13AW (Deck Panel Diaphragm Plumbness and Flatness)

This QA Inspector performed Dimensional Inspection for measuring Deck Panel Diaphragm Plumbness and Flatness along with ABF QA Inspector for the Segment 13AW at the following locations:

The Deck Panel to the Deck Panel Diaphragm plate plumbness and flatness were measured from east and west side of the Deck Panel Diaphragm at Panel Points (PP) at following Panel Points.

Between U-Ribs from 1st till 4th, from 10th till 15th, from 20th till 22nd, from 25th till 30th and from 37th till 39th.

Panel Point 117.5

Panel Point 118

Panel Point 118.3

Panel Point 118.65

Panel Point 119

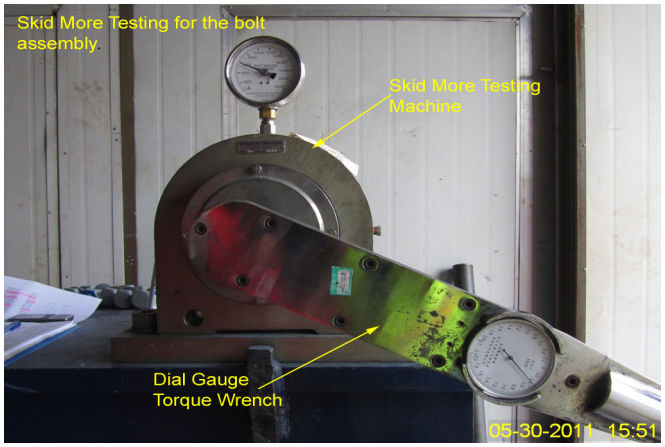
Panel Point 119.3

Panel Point 119.65

Panel Point 120

The QA Inspector measured the plumbness using carpenter square and performed flatness check using 710mm Straight Edge.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer